Bargaining Group: Management

## CHIEF TECHNOLOGY OFFICER

### **DEFINITION**

Under general direction, performs highly responsible administrative and complex technical work in the development and operation of computerized systems; includes the design, creation, monitoring, administration, troubleshooting and enhancement of personal computer networks, wide area networks, single and multi-user platforms operations and maintenance.

#### **EQUIPMENT, METHODS & GUIDELINES**

Uses Federal, State and local codes, policies, procedures and practices; vendor contracts; City vehicles; telephones, the World Wide Web, technical manuals, industry publications, user documents and telecommunications equipment.

## **WORKING CONDITIONS**

Predominately inside work. May include irregular hours to attend evening meetings, and resolve system problems. May also include pressure generated by equipment malfunctions, deadlines and workloads.

#### PHYSICAL DEMANDS

The work emphasizes speech, hearing, and vision (including color vision necessary for accurately interpreting visual displays). Installation and troubleshooting work involves standing, stooping, crawling, and reaching. The work also requires the ability to lift object weighing up to fifty pounds, such as boxes of computer paper, computers, monitors and terminals.

#### SUPERVISION RECEIVED AND EXERCISED

Receives supervision and direction from the Director of Finance. Supervise and evaluate staff in the Computer Technician and Information Systems Coordinator classifications.

#### **EXAMPLE OF DUTIES**

Duties may also include, but are not limited to the following:

Performs daily backup of City computer networks, adding, deleting, and changing users, purging files, and monitoring various servers for available capacity; analyzes work requests and set priorities.

Monitors performance of Wide Area Networks (WANs), Local Area Networks (LANs) and supporting hardware.

Researches costs of hardware and software to assist in budget preparation and forecasting.

Construct new servers and workstations from component parts.

Participates in planning and research to develop improved computerization capabilities; confers with City departments to evaluate information needs; researches, develops and recommends solutions.

Manages the operation of network servers, personal computers, micro-computers and networked systems, including PC-based data-communication and telecommunications systems; maintains standards of operational capacity and ease of workflow.

Prepares a variety of written correspondence, reports, proposals, and other written materials.

Supports the preparation of RFP packages for computer systems and related equipment, devices and services; coordinates maintenance and repairs; reconciles and approves invoices for payment.

Confers with users regarding operating problems, performs routine troubleshooting, and identifies alternative courses of action; assists users in securing resources and services necessary to resolve problems.

Performs research and analysis necessary for developing appropriate recommendations regarding hardware/software configurations and interfacing with other networks, WANs, LANs, client servers, and microcomputers.

Confers with users to identify training needs and coordinates the procurement and scheduling of hardware and software orientation and training.

Interacts with staff, vendors and customers to identify and resolve computer and other equipment problems.

Keeps informed regarding new technology and the ongoing development of WANs, LANs, networks, client servers, microcomputer systems and related hardware and software, and software applications; acquires and distributes pertinent information to user departments.

Acts as project manager on complex systems development, evaluation, and installation projects.

Negotiates contracts associated with technology.

Performs other work as assigned.

# **QUALIFICATIONS**

Working knowledge of the various principles, procedures, practices, techniques, trends, and nomenclature associated with Wide Area Networks, Local Area Networks, and other associated microcomputer systems; knowledge of the capabilities and limitations of related hardware including internal memory, video-display terminals, printers, disk drives, routers, servers, fiber optics, network switches, internal and external communications devices; knowledge of the capabilities and limitations of various operating systems, software alternatives, such as pertaining to word processing, electronic spreadsheet, video text, database, and programmed instruction; and of various training and industry information resources. Thorough working knowledge of Token ring, Ethernet, and all communication protocols used in the Wide Area Network. Working knowledge of trouble shooting techniques, diagnostics, and repair of network, and communications problems.

Ability to identify and conceptualize user information needs, work flow requirements, data acquisition problems, and related microcomputer system configuration requirements; to work effectively with hardware and software vendors; to demonstrate the operation of a variety of related hardware and software; to apply criteria regarding microcomputer applications; to install, troubleshoot, and maintain various operating systems; to perform effectively under the conditions associated with the work; to meet the physical demands of the work; to develop and maintain appropriate documentation; to work with and maintain the confidentiality of sensitive information; to communicate effectively orally and in writing; to establish and maintain cooperative and effective relationships with those contacted in the course of work; and to be flexible and adaptable in an environment of rapidly changing technology.

## **Ability to:**

Troubleshoot, analyze and resolve computer and network hardware and software problems.

Install and maintain computer and networking systems.

Use required tools, test equipment and diagnostic programs.

Conceptualize user information needs and problems; understand departmental operations and identify improvements to enhance productivity.

Set priorities, work independently and meet critical deadlines.

Communicate effectively, orally and in writing, convey technical concepts to non-technical users.

Establish effective working relationships in coordinating computer activities and resolving problems.

## **EXPERIENCE AND EDUCATION:**

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and experience would be:

An Associate of Arts Degree in Computer Science, Information Technology or related field and five years of progressively responsible employment in computer operations, troubleshooting and repair. Completion of an accredited computer training school will be considered in lieu of an Associates of Arts Degree.

Two years of experience may be substituted with a Bachelor's Degree in Computer Science, Information Technology or related field. Experience with networking and mini and microcomputers is essential.

# **SPECIAL REQUIREMENTS:**

Possession of a Class C California Driver's License and maintains and a good driving record.

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